

Evaluating the Georgia HOPE Scholarship Program

Impact on Students Attending Public Colleges and Universities

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Two years after starting college, recipients of Georgia's HOPE scholarship program are more likely to still be enrolled in college, have higher grade point averages (GPA), and have earned more credit hours than their counterparts. The Council for School Performance, housed in the Applied Research Center in the School of Policy Studies at Georgia State University, conducted the first assessment of the impact of the HOPE scholarship on college performance. After following the 1994-95 HOPE recipients into their third year of college, the results show a positive impact of the program on all three outcomes included in the study.

HOPE provides Georgia high school graduates who earn an overall high school GPA of 3.0 or higher with free tuition, fees, and a book allowance at public colleges and universities. Only HOPE scholars with a high school GPA between 3.0 and 3.16 were selected for this evaluation. This allowed researchers to isolate the effect of the HOPE scholarship on the recipients by selecting a comparison group with similar characteristics. The comparison group was matched by their core high school GPA (includes academic courses only) and institution type¹. The students in the comparison group did not receive the HOPE scholarship because they did not apply or did not meet all of the HOPE eligibility requirements.

Two questions were analyzed in this evaluation: (1) Does HOPE motivate higher levels of performance and higher rates of persistence among students in college? (2) Does HOPE allow students greater choice in selecting institutions of higher education? Other factors such as institution type, sex, race, and high school preparation were included in this analysis because they also affect college performance. This study compares students with similar backgrounds to isolate the impact of HOPE on college performance. In future studies, we will examine another potential impact of HOPE, its effect on high school performance.

Does HOPE motivate higher performance in college?

After two years of college, HOPE recipients whose high school GPAs were between 3.0 and 3.16, referred to as borderline HOPE scholars, had higher GPAs, more credit hours, and higher persistence rates than a matched sample of non-HOPE recipients. HOPE recipients are motivated to earn a B or better in college to retain the financial reward of free tuition, fees, and books. In some cases, the possibility of earning a scholarship would motivate capable students to simply work harder. Since HOPE eligibility depends on a set and measurable standard (a GPA of 3.0 or higher at the completion of 45, 90, and 135 quarter hours), these students have both a definitive goal and intermediate feedback as they acquire credits each quarter.

¹ Institution type is based on Board of Regents' categories, which include national universities, regional universities, state universities, and two-year colleges. National universities are Georgia State University, Georgia Institute of Technology, and University of Georgia. Regional universities are Georgia Southern and Valdosta State. State universities include Albany State, Clayton State, and others.

Because HOPE is relatively new, the research follows the progress of students through only two years of post-secondary education. Three commonly used measures of college performance have been used: persistence in college after two years of study, number of earned college credits, and college GPA. Persistence is defined as whether the student is enrolled in a Georgia public college or university in the fall quarter of 1996, two years after beginning collegiate studies. College credits consist of quarter credit hours for work contributing to a degree obtained through the summer quarter of 1996. Finally, college GPA is the cumulative grade point average of the student through the same time period.

Highlights of the study's findings are:

- After two years of study, HOPE students have slightly higher college GPAs and significantly more college credits. They are also less likely to drop out of college.
- Students who are better prepared in high school do better in college, earning higher college GPAs and more college credits. They are also less likely to drop out of college.
- Students who are required to take learning support courses have lower college GPAs and fewer college credits, but they are more likely to stay in college.
- The type of institution attended has no effect on college GPAs. However, students in two- and four-year institutions progress more slowly and drop out more frequently than their counterparts in Georgia's national and regional universities.
- Female students have higher college GPAs and more college credits than male students. They are also less likely to drop out of college.

What is the impact of HOPE on college GPA?

Borderline HOPE students have slightly higher college GPAs after two years of college controlling for all other factors. The difference amounts to about one-tenth of a point on a four-point scale. The borderline HOPE students in this study have an average 1.90 GPA in college. Overall, 1994-95 HOPE scholars have an average college GPA of 2.41. Because higher GPAs also lead to more credit hours earned and greater likelihood of staying in school, this HOPE impact yields additional benefits.

Other factors that might influence college performance were included in the analysis. As expected, high school preparation affects college performance. Students with higher SAT verbal scores have higher GPAs, while students who are required by Board of Regents policies to take learning support courses have lower GPAs. Unexpectedly, we find that students with college prep diplomas had lower GPAs than those who did not acquire the college prep seal. Female students have higher GPAs than males, but African-American students have lower GPAs than other students. Those who transfer to other institutions have lower college GPAs, probably because dissatisfaction with the school or with their own performance would likely cause students to transfer. After controlling for these other factors, the type of institution attended has no independent effect on GPA averages except at two year institutions, where GPA averages are about one-tenth of a point higher.

What is the impact of HOPE on college credits earned?

After two complete years of college, the borderline HOPE students have earned about 48 credit hours, compared with 35.3 for their matched non-HOPE students. Overall, 1994-95 HOPE scholars have earned 64 credit hours in two years of study. The difference that is

directly

attributable to HOPE is a little over one course, or seven credit hours. As noted above, students with HOPE have higher GPAs, which also contributes to earning more credits.

Again, we find other factors also influence the credit hours earned. As expected, high school preparation affects college performance. Those with higher SAT scores earn more credits, and those requiring learning support courses studies earn 4.2 fewer credit hours than those who do not. Also as expected, institutional type affects college performance. Students at state universities and state two-year colleges earn fewer credit hours than students at national institutions, while students at regional universities earn the most. Those who transfer to other institutions earn 11 fewer credit hours than those who do not transfer. African-American students earn 4.1 more credit hours than other students. Female students earn 2.1 more credit hours than their male counterparts.

What is the impact of HOPE on persistence in college?

In the fall of 1996, 60.8% of the borderline HOPE scholars started into their third year of post-secondary education, compared with 51.1% of their comparison group. For all HOPE scholars that entered with this class, 73.7% are still in college in a Georgia public college or university. After controlling for other factors, three percentage points more of the HOPE scholars are likely to be in school than their counterparts.

After controlling for other factors, a one-point increase in college GPA (on a four-point scale) translates into a 18% increase in persistence rate. Students who transfer are also more likely to stay in school, which may offset their lower GPAs and fewer number of earned credits. It is likely that a number of these students have attended two-year institutions and are transferring at this point to continue their baccalaureate studies.

Again high school preparation affects college performance. Students with higher SAT scores are more likely to remain in school. As with transfer students, we can see a positive effect of remedial courses that shows up relative to persistence. Students who are required to take non-credit learning support courses are more likely to be in school after two years than those who do not--controlling for other factors. Learning support courses appear to serve an important role in helping students cope and persevere with their college studies.

Finally, it is important to note that after controlling for receipt of HOPE, high school preparation, and other influences on performance, African Americans and females are more likely to persist in college after two years. African Americans are seven percent more likely than other racial groups to persist in college, and females are five percent more likely than males to persist in college, after controlling for other influences.

What is the impact of HOPE on African-American students?

One of the intended consequences of the HOPE scholarship program is to increase the attainment of a college education by traditionally underrepresented groups. Educational opportunity is at the core of strongly held American values and often posed as the most widely accepted antidote to systematic discrimination among Americans. Some analysts of the HOPE program have speculated that the program would negatively affect traditionally underrepresented groups because these groups are less likely to meet the B or better eligibility standard for high school GPA.

The results of this research showed that African Americans with HOPE performed at higher levels than those without HOPE. Those with HOPE had higher achievement levels in high school, have higher college GPAs, have earned more college credit hours, and were even more likely to still be in college after two years of study. Table 1 shows the higher levels of achievement among African-American HOPE recipients. Sixty percent (60.3%) of those with HOPE are still in school, versus 46.9% of those without HOPE. Cumulative GPAs are .23 points higher among HOPE recipients. And those with HOPE have earned 16.8 more credit hours, the equivalent of three college classes. HOPE appears to be motivating African Americans to work harder in high school and, by giving these students more time for study, increasing college persistence levels and allowing them to complete college in less time.

Table 1. Impact of HOPE on African-American Students

	African Americans with HOPE Scholarship	African Americans without HOPE Scholarship
High School Preparation		
High school GPA (core)	2.49	2.44
Combined SAT scores	806	732
Performance in College		
Still in school after 2 years	60.3%	46.9%
Cumulative college GPA	1.75	1.52
Total college credits	45.9	29.1

What is the impact of HOPE on institutional choice?

One of the most highly publicized impacts of HOPE is that it has increased the likelihood that Georgia residents will attend Georgia institutions. Colleges from Georgia's border states report enrolling fewer top flight Georgia students. Apparently, some of the most competitive high school graduates have chosen to remain in the state, thereby increasing first-year student enrollments at national universities in the state (University of Georgia, Georgia Institute of Technology, and Georgia State University) from about 6,200 in the 1991-92 school year to about 6,700 in 1995-96, and increasing the average SAT scores of enrolled students in the same time period from an average combined score of 1039 to 1073.

However, the main focus of this section is on the range of choice facilitated by HOPE for students who attend college within the state. There are two means by which HOPE could expand students' choice of institutions of higher education. The HOPE scholarship may increase access to higher education for those students who had previously been excluded due to financial restrictions. In addition, students who might have attended a local institution to defray room and board expenses may be able to afford an institution further away, where these expenses can now be partially off set. It may be that some of these students will be able to choose a more competitive institution in Georgia and live there rather than at home.

For the samples of students used in this study, HOPE students differ from non-HOPE students in significant ways. A comparison of HOPE and non-HOPE (see Table 2) students revealed that the non-HOPE students are more likely to attend state two-year colleges (42.7%) than HOPE students (23.5%). HOPE students were more likely to attend state universities (37% for HOPE vs. 33% for non-HOPE sample), as well as regional universities (26.7% for HOPE vs. 12% for non-HOPE). Just over 12% for both groups attend national universities. It is important to note that overall 28% of all HOPE recipients attended the state's national universities.

Table 2. Effect of HOPE on Institutional Choice (Borderline HOPE and non-HOPE Samples Matched on Core High School GPA)

Choice of Institution	Percent Attending		Combined SAT Scores		Required Learning Support	
	HOPE	without HOPE	HOPE	without HOPE	HOPE	without HOPE
Enrolled in National University (UGA, GA Tech, GA State)	12.8%	12.3%	1013	1036	31.5%	27.3%
Enrolled in Regional University (GA Southern, Valdosta State)	26.7%	12.0%	879	856	29.6%	43.0%
Enrolled in State University (e.g. Albany State, Clayton State)	37.0%	33.0%	864	809	39.1%	51.9%
Enrolled in State Two-year College (e.g. Dalton Col., Waycross Col.)	23.5%	42.7%	839	749	43.4%	59.6%

SAT averages increase from the least to most competitive institutions, based on the four categories of institutions. HOPE students have higher SAT scores than the non-HOPE sample in all types of institutions except the national universities. Fewer HOPE students required learning support courses in all institutional types except the national universities. This analysis suggests that more competitive students were able to move to more competitive state and regional universities. HOPE scholarship recipients seem to exercise greater choice in selecting their institution than other graduates with similar core course GPAs. This is especially true with respect to choosing two-year institutions, which tend to attract students who have a limited range of choice.

How comparable are the groups of HOPE and non-HOPE students in this study?

The first group included 2,080 borderline HOPE students (HOPE GPA 3.0-3.16) who graduated from Georgia high schools in 1994 and enrolled in the freshman class of 1994-95 in University System of Georgia Institutions. The comparison group was created by matching the HOPE sample with a group of 2,057 students from the freshman class who did not receive HOPE. The groups were matched using core course high school GPAs to control for differences in the level of high school preparation in the two groups and institutional choice to control for differences due to the type of institution attended.

Overall, HOPE students are more likely than the matched non-HOPE sample to have a college prep diploma (93.1% for HOPE vs. 79.7% for non-HOPE). The non-HOPE sample has a slightly higher percentage of women and African Americans, and more students requiring learning support (48.5% vs. 36.6% for HOPE students). HOPE students transferred between Georgia colleges at a slightly higher rate (14.5% versus 12.4% for non-HOPE).

A major concern in this matched group design is that differences exist between the groups that are not related to the program. To reduce this possibility, the research design included other factors that may affect college level performance. Three types of variables in our final statistical models were used to control for (1) the effects of institutional choice (variables for type of institution attended and whether or not the student transferred during the two years looked at in this study); (2) level of high school preparation (SAT scores, type of high school degree, and required learning support courses); and (3) demographic variables that have been shown to

relate to college performance (race and sex). After controlling for these factors, HOPE remained a significant impact on college GPA, credits, and persistence.

Table 3. Comparisons of Borderline HOPE and Non-HOPE Samples Matched by Core High School GPA and Type of Institution Attended

	With HOPE	Without HOPE
Demographic Characteristics		
Female students	49.8%	54.0%
African-American students	30.4%	32.5%
High School Preparation		
Learning support	36.6%	48.5%
College prep endorsement	93.1%	79.7%
Choice of Institution		
Transferred to new institution	14.5%	12.4%
Performance in College		
Still in school after two years	60.8%	51.1%
Cumulative college GPA	1.90	1.76
Total college credits	48.0	35.3

How do the borderline HOPE students compare to HOPE students overall?

The HOPE students used in this study were drawn from borderline recipients. On average, these students have lower performance levels than do all HOPE students, and they exhibit different rates of attendance at Georgia institutions. For example, over 28% of all HOPE scholars enrolled at national universities within the state while only 12.8% of the borderline students enrolled in national universities. For all variables, the performance of the HOPE scholars overall exceeded the performance of the borderline students (see Table 4).

Table 4. Comparison of Borderline HOPE students with all HOPE

	Borderline HOPE students GPA 3.0-3.16 (N=2,080)	All HOPE students (N=10,301)
Choice of Institution		
Enrolled in national university	12.8%	28.2%
Enrolled in regional university	26.7%	19.9%
Enrolled in state university	37.0%	32.4%
Enrolled in state two-year college	23.5%	19.5%
High School Preparation		
Learning support	36.6%	20.9%
Combined SAT scores	881	976
High school GPA (core)	2.48	3.04
Demographic Characteristics		
Female students	49.8%	60.9%
African-American students	30.4%	21.1%
Performance in College		
Cumulative college GPA after 2 years	1.90	2.41
Total college credits after 2 years	48.0	64.0
Still in college/university after 2 years	60.8%	73.7%

*for HOPE students newly enrolled in Georgia's university system in fall 1994

**does not include sample of HOPE students used in this study

In addition to differences in enrollment patterns, we expect the borderline HOPE students to have lower achievement levels. Table 4 shows the differences between the borderline HOPE students sampled for this study and all HOPE students. The HOPE students as a group are more likely than the study group to be female, white, enrolled in national universities, and not required to take learning support. Naturally, the achievement levels of the HOPE students overall are much higher than the study sample. In high school, their SAT scores and GPAs were higher. In college these differences persist. The HOPE students who are excluded from this study have higher college GPAs, have more college credit hours, and are more likely to be in college after two years of study.

Are the HOPE recipients retaining their scholarships?

For students who are on track to graduate in four years and have completed over 90 credit hours, 66% of all HOPE recipients have a GPA high enough to retain their scholarship. Of those who have crossed only the first threshold, that is, those that have acquired 45 but less than 90 credit hours, 25% are maintaining the 3.0 or better GPA. For the borderline HOPE scholars in this study, only 29.8% of those who have earned 90 credit hours and 9.5% of those with 45 to 89 credit hours have the required average. With this group it is interesting to note that despite losing their HOPE scholarship, they are staying in college at higher than expected rates. Even though they must use their own resources or other forms of financial aid, it seems that by gaining a HOPE scholarship, they are more likely to stay in school.

Table 5. Comparing Borderline HOPE Students to HOPE Students Overall: Percent of Students Retaining HOPE (GPA>3.0) at 45, 45-89, and 90+ Credit Hours

Credit Hours Earned	College GPA Greater than or equal to 3.0 (retain Hope)			
	Less than 45 credit hours	45-89 credit hours	More than 89 credit hours	Total
Borderline HOPE (HS GPA 3.0-3.16)	1.3% (N=1133)	9.5% (N=808)	29.5% (N=139)	6.4% (N=2080)
All Students with HOPE	4.3% (N=3897)	25.0% (N=4057)	66.0% (N=2347)	26.5% (N=10301)

Conclusion

After two years of college, HOPE registers an impact on GPA, credits earned, and persistence. It seems to have a positive effect even among the group that is most likely to lose the financial benefits of the program. The study findings are limited due to the two years available for study since the income eligibility for the program has been significantly raised (the household income cap was \$100,000 for the 1994-95 HOPE scholars). The study should be continued for three more years to examine the impact of HOPE on college graduation rates. At least as important is the impact of HOPE in motivating higher performance levels in high school. Results from this and other studies show that high school preparation is key to success in college. If HOPE is effective in encouraging higher levels of high school preparation, its impact on college performance could be much larger than estimated in this evaluation. The Council for School Performance is currently evaluating HOPE's impact on high school motivation and performance.

Description of Methods for the Evaluation of the HOPE Scholarship Program

Selection of borderline HOPE recipients: Study population from which this group was selected

was then matched with data from the Board of Regents SIRS database. When we limited the study to 1994 graduates, and excluded those who were listed as transfers and those with incomplete data, 10,301 HOPE students remained. HOPE students selected for this study were those with an overall high school GPA of 3.0 to 3.16, yielding 2,080 students. On core courses these students had a GPA of 1.2 to 4.0. The HOPE recipients with lower GPAs were selected because these are the students who are less likely perform sufficiently well to maintain their scholarship. While it is nearly impossible to find good comparisons at the upper ranges of performance, at the lower levels of HOPE eligibility it is possible to select a reasonably matched group.

Selection of matched comparison group: The study population for this group was 39,097 non-HOPE students from the Board of Regents SIRS database who enrolled in college in the summer and fall of 1994. When we eliminated transfer students, graduate students, and non-traditional students, 12,328 students remained. These students were matched with the 2,080 HOPE students by core course GPA and the type of institution attended, yielding 2,057 students (at state universities there were 23 fewer non-HOPE students with a core course GPA of 2.5 to 2.7, so our analysis used weighted averages to account for the difference in sample size). We included institution type attended as a matching criteria because of different rates of institutional enrollments among borderline HOPE students and the group with which they were originally matched.

Analysis: The percentages and averages for the groups presented in the tables and narratives are simple averages of the two groups. Because the matching program had not controlled for all pre-existing differences, a number of variables were included in least squares regression equations to control for observable differences. Those results are presented after the percentages in the narrative. The regression equations are also used to provide estimates of the impact of the other factors on each of the three outcomes that were analyzed. All regression analysis used weighted scores because of the differences in sample sizes between the HOPE and non-HOPE samples.

The mission of the Council for School Performance is to provide impartial and accurate information so that schools and the communities they serve will have appropriate benchmarks for performance and accountability. The Council will be a positive body to promote quality and progress in all schools, helping communities attain local, state and national education goals by sharing innovative educational practices and local successes.

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